

TRADE OCCUPATIONS AT PEARL HARBOR NAVAL SHIPYARD & INTERMEDIATE MAINTENANCE FACILITY (IMF)

COATINGS & COVERINGS

Fabric Worker: Plan, design, lay out, construct and install containments using clear PVC sheeting, Herculite and other flexible materials. Other work includes reupholstering furniture and manufacturing tool bags, tank suits, banners, tents, leather articles and items of canvas, Naugahyde, Herculite and linen.

Painter-Blaster: Apply paints, powder coating and coverings for functions, decorative or protective purposes aboard submarines, ships, and in shop areas.

Plastic Fabricator: Build, modify and repair plastic components by using techniques such as casting, fiberglass laminating, thermoforming, vacuum bag molding, compression molding or spray coating using a diverse selection of synthetic compounds. Milling of rubber compounds, valve repair, finish painting, waterjet cutter operation and plug wiring and molding.

Shipwright: Use transits and levels to establish working lines and reference points, check vessel alignment during docking evolutions, and construct precise docking blocks on which the vessel sits while in dry dock. Install, maintain and remove all staging associated with shipwork. Other work includes rough and finish woodworking, and making wooden mock-ups.

Industrial Equipment Mechanic

Overhaul, operate, repair and perform operational maintenance and security checks on stationary equipment situated on various graving docks, floating docks, marine railways, and caissons. Equipment maintained and operated is located dockside or afloat. Equipment includes various types of pumps, flooding gates, flooding valves, capstans, winches, motor, and other related equipment needed to provide the necessary docking services.

ELECTRICAL/ELECTRONIC TECHNOLOGY

Electrician: Install and repair motor control circuits, motors and generators and portable electric equipment; manufacture and repair cables, connectors and panels used for temporary electrical service for industrial and Navy vessels. Typical work includes the installation and maintenance of shore power and shore electrical services in support of production and ship's habitability needs.

Electronic Measurement Equipment Mechanic: Inspect, troubleshoot, repair, overhaul, modify, test and calibrate a wide range of complex electrical/electronic/electromechanical instruments and equipment.

Electronics Mechanic: Install, troubleshoot, repair and test shipboard electronic equipment and systems. Systems include radar, sonar, fire control, communications and radio. Typical work also includes the manufacture, repair and test of various sonar transducers and arrays.

LIFTING & HANDLING

Rigger: Uses lifting and handling equipment such as cranes, chain hoists, wire pennants, shackles, beam clamps, strong backs and dollies to safely remove, replace or reposition various pieces of heavy equipment and components on ships and submarines, in and around dry docks and in buildings.

Heavy Mobile Equipment Mechanic

Maintain heavy mobile cranes and equipment. Repair and modify combustion powered heavy-duty vehicles and heavy mobile equipment such as portal, truck, and floating cranes. Disassemble, repair, and modify heavy-duty engines, transmissions, and heavy-duty drive and brake systems. Troubleshoot causes of malfunction, and determine the best repair methods on complex mechanical, pneumatic, and hydraulic control systems.

MECHANICAL

Machinist: Manufactures needed parts using machines such as lathes, milling machines, boring machines, drilling machines and computer controlled machines (CNC). Work involves disassembling, inspecting, machining, reassembling and testing components such as valves, compressors and pumps.

Marine Machinery Mechanic: Installs, removes, optically aligns, tests, overhauls and repairs ship's main propulsion machinery including steam turbines, internal combustion engines, reduction gears, propeller shafts, pumps, valves, auxiliary engines, nuclear reactor components, ordnance machinery and other shipboard components.

Production Machinery Mechanic: Install, repair, inspect and rebuild industrial plant equipment and machinery. Operates machine tools utilized for the manufacture and repair of components and parts. This also includes preventive maintenance and repair of industrial plant equipment and the associated air, hydraulic and lubrication systems.

PIPING AND TEMPORARY SERVICES

Pipefitter: Remove, repair, install the major propulsion, auxiliary and weapons systems aboard submarines. Manufacture, install, repair, maintain, and remove all dockside to shipyard temporary piping services.

Insulator: Apply a variety of insulation materials on hulls, steam turbines, distillation plants, refrigeration plants, ventilation ducts and other submarine piping systems to prevent loss of heat or cold, to prevent condensation and reduce transfer of noise from the submarine to the sea.

QUALITY ASSURANCE

Metals Inspector: Perform non-destructive testing (NDT) of welds and various components of naval ships and submarines. This involves using visual, liquid penetrant, magnetic particle, eddy current, radiography, and ultrasonic-testing methods to inspect work accomplished by welders, shipfitters, pipefitters, and machinists. These inspection methods are also used on existing shipboard components to determine repair or replacement due to wear and fatigue.

STRUCTURAL

Sheetmetal Mechanic: Layout, manufacture, install and repair complex ventilation systems, furniture, lightweight bulkheads and doors on ships and submarines.

Shipfitter: Layout, manufacture, install, remove, and repair structural assemblies on ships and submarines, varying in size from less than 100 pounds to over several tons.

Welder: Join and cut all types of industrial and marine metals using complex welding and thermal cutting processes during the overhaul, repair and modernization of ships and submarines.

PEARL HARBOR NAVAL SHIPYARD & INTERMEDIATE MAINTENANCE FACILITY
(PHNSY & IMF)
APPRENTICE RECRUITMENT
JOB FAIR

RIGGER

The Rigger occupation involves the selection, installation, and use of cables, ropes and other weight handling gear to lift, move, and position heavy loads. Riggers use complex multipoint suspension techniques, which enables them to maneuver over, under, and around obstacles by tilting, dipping and turning the suspended load. Other duties include the fabrication, installation and repair of standing and running rigging and wire cable or fiber rope articles such as slings, towing bridles, wire rope nets, and other ship and boat rigging and weight handling gear.

Riggers direct the operation of cranes and similar equipment and plan for clearance and safety factors. They assist in ship docking operations by laying out and handling docking lines and tackles, snubbing lines on cleats or bollards, hauling in lines by operating capstans, and performing similar duties. Riggers work with Shipwrights for dock build-ups and for the positioning of the ship during docking operations.



The Rigging trade involves frequent lifting and carrying of weights up to 100 pounds with occasional heavy exertion. This lifting and carrying requirement is inherent to the rigging trade and is accomplished on a daily basis. Riggers must keep themselves physically fit and use proper lifting techniques in order to prevent back injuries. The work also requires frequent sitting, kneeling, crouching, stooping, climbing, cramped or awkward positions, visual acuity, color vision, depth perception, close hand-eye coordination and keen hearing. Job may involve frequent exposure to danger from moving objects, falls from elevated structures, severe cuts from sharp edges, etc. Riggers work indoors, outside and aboard ships under conditions that may involve dust, dirt, vibrations, loud noise, poor illumination, poor ventilation, unpleasant odors, etc.

Journeyman Riggers have the knowledge of *safe* rigging practices and weight handling techniques; the ability to plan and select the appropriate gear; a good understanding of math and physics, and the skill to assemble, repair, and install rigging on a variety of objects.